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The Perfect FIT: Lessons for Renewable Energy Subsidies in the World Trade Organization

Daniel Peat^{*}

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I. INTRODUCTION

Feed-in tariffs, or FITs, are minimum guaranteed resale prices for renewably produced energy usually set by public or quasi-public authorities.¹ Exemplary of a new generation of subsidies that are designed to stimulate the green economy, their use within an increasingly more profitable sector highlights the growing antagonism that exists between the current rules of the multilateral trading system and environmental issues.² The World Trade

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1. For the purposes of this paper, renewable energy means energy produced by solar, wind, geothermal and tidal processes.

2. See, The Pew Charitable Trusts, *Global Clean Power: A \$2.3 Trillion Opportunity* 73, THE PEW CHARITABLE TRUSTS (2010), available at http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Global_warming/G20-Report-LowRes.pdf.

Organization (“WTO”)³ has admittedly not been completely indifferent to environmental issues in the past.⁴ Progress in the current Doha Round of negotiations, however, has stalled and shows little sign of improving.⁵ In particular, the lack of a negotiating mandate for a substantive agreement on renewable energy subsidies within the WTO creates tensions between subsidies permissible under existing WTO law and those aimed at promoting the generation of renewable energy, leaving such subsidies vulnerable to legal challenge. This has manifested itself in the submission of three international trade disputes involving renewable energy subsidies to the Dispute Settlement Mechanism (DSM) of the WTO in the past two years.⁶ The two most recent disputes, *Canada—Certain Measures Affecting the Renewable Energy Generation Sector* (hereinafter “*Canada—Renewables*”)

3. The World Trade Organization is the organization within which multilateral international trade agreements are negotiated, concluded and enforced. It was created in 1994 and was preceded by the General Agreement on Tariffs and Trade (GATT).

4. Notable actions by the World Trade Organization (WTO) include the creation of a Committee on Trade and the Environment, the inclusion of select environmental issues in the negotiating mandate of the current Doha Round, and the explicit recognition that the WTO holds to tools to promote climate change mitigation. Decision on Trade and Environment, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, 1867 U.N.T.S. 154, available at http://www.wto.org/english/docs_e/legal_e/56-denv.pdf (creating the Committee on Trade and the Environment); World Trade Organization, Ministerial Declaration, Nov. 14, 2001, WT/MIN(01)/DEC/1, 41 I.L.M. 746, ¶¶31-32 (2002), available at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.pdf (negotiating the Doha Round); Director-General Pascal Lamy, Speech at the Informal Trade Ministers Dialogue on Climate Change in Bali, Indonesia (Dec. 9, 2007), transcript available at http://www.wto.org/english/news_e/sppl_e/sppl83_e.htm (acknowledging the environmental goods and services the Doha Declaration could provide). See also, Deputy Director-General Harsha V. Singh, Speech at the International Center for Trade and Sustainable Development Trade and Climate Change Symposium in Durban, South Africa (Dec. 5, 2011), transcript available at http://www.wto.org/english/news_e/news11_e/envir_05dec11_e.htm#speech.

5. See, *Goodbye Doha, Hello Bali*, THE ECONOMIST (Sept. 8, 2012), available at <http://www.economist.com/node/21562196>.

6. Request for Consultations by the United States, *China—Measures Concerning Wind power equipment*, WT/DS419/1, Jan. 6, 2011, available at [http://www.worldtradelaw.net/cr/ds419-1\(cr\).pdf](http://www.worldtradelaw.net/cr/ds419-1(cr).pdf) [hereinafter “*China—Wind Turbines*”]; Request for the Establishment of a Panel by Japan, *Canada—Certain Measures Affecting the Renewable Energy Generation Sector*, WT/DS412/5, Jun. 7, 2011, available at [http://www.worldtradelaw.net/pr/ds412-5\(pr\).pdf](http://www.worldtradelaw.net/pr/ds412-5(pr).pdf) [hereinafter “*Canada—Renewables*”]; Constitution of the Panel Established at the Request of the European Union, *Canada—Measures Relating to the Feed-In Tariff Program*, WT/DS426/6, Jan. 24, 2012, available at http://trade.ec.europa.eu/doclib/docs/2012/april/tradoc_149293.pdf [hereinafter “*Canada—Feed-in Tariff*”].

and *Canada—Measures Relating to the Feed-In Tariff Program* (hereinafter “*Canada—Feed-in Tariff*”), both concern the legality of the FIT program adopted by the Canadian province of Ontario, and should be adjudicated by a panel in the near future.⁷

In the absence of a WTO agreement specifically regulating renewable energy subsidies, this Comment has as its aim the elucidation of lessons that can be drawn regarding permissible subsidies for the promotion of renewable energy production within the WTO. After describing the anatomy of a FIT and the arguments for renewable energy subsidies in Part II, this Comment will outline the framework and history of subsidy regulation within the WTO Agreements in Part III.⁸ Parts IV, V, and VI will analyze the WTO Agreements and relevant Dispute Settlement Understanding jurisprudence to proffer four lessons for policymakers that should be borne in mind throughout the design and implementation stages of renewable energy support measures. These lessons aim to ensure legality at three levels of analysis: first, the possibility of general, non-specific government support that would not fall within the WTO definition of subsidies will be explored; second, the paramount lesson of non-discrimination for government support measures that do fall within the WTO definition will be highlighted; finally, two lessons that are aimed at ensuring that support measures fall within an “environmental exception” potentially available under Article XX of the 1994 General Agreement on Tariffs and Trade (GATT) will be discussed.

Set against the impasse in the Doha Round negotiations—now in their twelfth year—this Comment adopts a realistic approach, which recognizes the unlikelihood of a multilateral agreement clarifying the status of renewable energy subsidies within the WTO in the near future. The objective desirability of subsidies should force policymakers to take heed of the WTO rules in the design and implementation of support measures for renewable energy.

7. *Canada—Renewables*, *supra* note 6; *Canada—Feed-in Tariff*, *supra* note 6.

8. The Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations and the Marrakesh Agreement Establishing the World Trade Organization and Annexes, Apr. 15, 1994, 1867 U.N.T.S. 14 (1994); Marrakesh Agreement, Apr. 15, 1994, 1867 U.N.T.S. 154 (1994).

II. THE ANATOMY OF A FIT AND THE ARGUMENT FOR RENEWABLE ENERGY SUBSIDIES

As previously noted, feed-in tariffs, or FITs, are policies adopted by public or quasi-public bodies that guarantee the producer of renewable energy a fixed resale price for an agreed period of time should certain conditions be met.⁹ In order to stimulate energy production by renewable methods, the guaranteed price is inevitably above market price for a significant period of time to provide both security and meet the opportunity cost of the investment to the energy producer. An illustrative example is the Ontarian FIT at the center of the *Canada—Renewables* and *Canada—Feed-In Tariff* disputes. Run by the Ontario Power Authority, a body that was created by provincial government statute in 2004,¹⁰ the program allows both large-scale (above ten kilowatts) and small scale (less than ten kilowatts)¹¹ private energy producers with qualifying renewable energy fuel sources (including solar photovoltaic cells, water, wind and bioenergy production systems)¹² to resell generated energy back onto the Ontario electricity grid at a fixed price for a twenty-year period.¹³ Based on this contract, the guaranteed price paid can be up to nine and one-half times that of the cost price of electricity to general consumers, with the possibility of annual price increases for eligible projects.¹⁴ Similar FIT schemes have been pursued around

9. Conditions include the use of certified renewable energy generating equipment. See Marie Wilke, *Feed-in Tariffs for Renewable Energy and WTO Subsidy Rules: An Initial Legal Review*, ICTSD PROGRAMME ON TRADE AND ENVIRONMENT, TRADE AND SUSTAINABLE ENERGY SERIES 1 (International Centre for Trade and Sustainable Development, Geneva, Switz., Aug. 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1919517.

10. Ontario Electricity Act 1998 (as amended), S.O. 1998, Chapter 15, Schedule A, Part II.1, art. 25.1(1), available at http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_98e15_e.htm.

11. Small-scale FIT projects fall within the remit of the Ontario Power Authority (OPA) microFIT program. See Ontario Power Authority, *microFIT Program Overview v. 2.0*, ONTARIO POWER COMPANY, available at <http://microfit.powerauthority.on.ca/sites/default/files/microFIT%20Program%20Overview%20v%20%201%206%20FINAL%20.pdf> (last visited Sept. 29, 2012) [hereinafter “OPA microFIT Program Overview”].

12. Ontario Power Authority, *Feed-In Tariff Program: Program Overview* 4, ONTARIO POWER AUTHORITY (2010), available at http://fit.powerauthority.on.ca/Storage/11160_FIT_Program_Overview_August_new_price_version_1.3.1_final_for_posting-oct_27.pdf [hereinafter “OPA FIT Program Overview”].

13. *Id.* at 30.

14. Calculated on the basis of a rooftop solar photovoltaic cell producing less than 250 kilowatts and the lower-tier price plan of the Ontario Energy Board. Ontario Power Authority, *FIT Price Schedule*, ONTARIO POWER

the world. For example, eighteen out of the twenty-seven European Union member-states have adopted schemes guaranteeing minimum resale prices for renewably produced electricity,¹⁵ as well as similar schemes existing within Australia,¹⁶ China,¹⁷ India,¹⁸ South Africa,¹⁹ and Switzerland.²⁰ Within the United States, FIT schemes have been adopted on a state, regional or municipal level in thirty-seven states²¹ including California,²²

AUTHORITY (Sept. 30, 2009), <http://fit.powerauthority.on.ca/fit-price-schedule>; Ontario Energy Board, *Electricity Prices*, ONTARIO ENERGY BOARD, <http://www.ontarioenergyboard.ca/OEB/Consumers/Electricity/Electricity+Prices> (last visited Oct. 2, 2012).

15. Misha Bechberger & Danyel Reiche, *The spread of renewable energy feed-in tariffs (REFITs) in the EU-25*, WIND-WORKS.ORG, http://www.wind-works.org/FeedLaws/bechberger_reiche_fTheSpread%20of%20Feed%20Laws%20in%20the%20EU.pdf (last visited Oct. 2, 2012).

16. See generally, Department of the Environment, Climate Change, Energy and Water, *Electricity Feed-In Tariff Scheme*, AUSTRALIAN CAPITAL TERRITORY GOVERNMENT, http://www.environment.act.gov.au/__data/assets/pdf_file/0005/144608/FITFactSheet.pdf (last visited Oct. 2, 2012).

17. See generally, Baizhen Chua, *China Sets Solar Power Price to Boost Profits, Investment*, BLOOMBERG NEWS (Aug. 1, 2011, 2:49 PM), <http://www.bloomberg.com/news/2011-08-01/chinese-government-sets-nationwide-solar-photovoltaic-power-on-grid-prices.html>.

18. See generally, Jawaharlal Nehru National Solar Mission Toward Building SOLAR INDIA, INDIA.GOV.IN, <http://india.gov.in/allimpfrms/alldocs/15657.pdf> (last visited Sept. 11, 2012); *Frequently Asked Questions on Biomass Power Generation*, GOVERNMENT OF INDIAN MINISTRY OF NEW AND RENEWABLE ENERGY, http://mnre.gov.in/file-manager/UserFiles/faq_biomass.htm (last visited Sept. 11, 2012).

19. National Energy Regulator of South Africa, *In the matter regarding Renewable Energy Feed-in Tariffs—Phase II by the National Energy Regulator of South Africa*, NATIONAL ENERGY REGULATOR OF SOUTH AFRICA, <http://www.nersa.org.za/Admin/DocumentUpload/UploadFiles/REFIT%20Phase%20II%20Reasons%20for%20Decision3531242010113153.pdf> (last visited Sept. 11, 2012).

20. *Compensatory feed-in remuneration: Important information on the registration process*, SWISS FEDERAL OFFICE OF ENERGY, <http://www.bfe.admin.ch/energie/00588/00589/00644/index.html?lang=en&msg-id=18371> (last visited Oct. 2, 2012).

21. The full list of states in which FIT schemes are in force is Alabama, Alaska, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington, and Wisconsin. *Database of State Incentives for Renewables & Efficiency—Financial Incentives*, US DEPARTMENT OF ENERGY, [http://www.dsireusa.org/incentives/index.cfm?EE=1&RE=1&SPV=0&ST=0&searchtype=P](http://www.dsireusa.org/incentives/index.cfm?EE=1&RE=1&SPV=0&ST=0&searchtype=Production&sh=1)roduction&sh=1 (last visited Sept. 12, 2012).

Colorado,²³ and Florida.²⁴ FITs have already successfully contributed to increasing the amount of renewable energy produced. For example, the United Kingdom FIT scheme, introduced by the Labour Government in April 2010, contributed to a forty-one-fold increase in the domestic use of solar panels and a forty-five percent reduction in their cost price.²⁵ Similarly successful has been the German FIT, which—in its twenty-one-year existence—has contributed to the augmentation of renewable energy production in the energy sector from five to twenty percent.²⁶

The rationale for government support measures for renewable energy, such as FITs, is based on two strands of argument: economic and environmental. Within the former, renewable energy is recognized as being produced at quantities below the social optimum for two reasons.²⁷ First, greenhouse gas (GHG) emissions do not impose a direct cost upon the producer or consumer, unless operating within the jurisdiction of a carbon emissions trading scheme, such as the European Union Emissions Trading Scheme.²⁸ The inability to internalize the cost of GHG emissions upon society causes underpricing, and consequential overconsumption, of energy produced by non-renewable sources. Additionally, the inability of markets to account for the societal cost of GHG emissions in prices means that consumers and producers do not have a financial incentive to pursue innovation in methods of renewable energy production that aim to reduce the cost of GHG

22. Assem. B. 1969, 2005–2006 Leg., Reg. Sess. (Cal. 2006).

23. COLO. REV. STAT. § 40-2-127 (2010).

24. FLA. STAT. ANN. § 377.806 (West 2011).

25. *UK Government changes to Feed-in Tariffs—new and proposed*, ENERGY SAVING TRUST, <http://www.energysavingtrust.org.uk/Generating-energy/Getting-money-back/Feed-In-Tariffs-scheme-FITs/UK-Government-changes-to-Feed-in-Tariffs-new-and-proposed> (last updated July 2012); *Fuel Costs per kWh*, BIOMASS ENERGY CENTER, http://www.biomassenergycentre.org.uk/portal/page?_pageid=75,59188&_dad=portal (last visited Sept. 11, 2012).

26. Christoph H. Stefes, *The German Solution: Feed-In Tariffs*, THE N.Y. TIMES (updated Sept. 21, 2011, 5:42PM), <http://www.nytimes.com/roomfordebate/2011/09/20/why-isnt-the-us-a-leader-in-green-technology/us-should-emulate-germanys-renewable-energy-model>.

27. The social optimum is the point on the utility possibility frontier that maximizes social welfare; John Black, Nigar Hashimzade, and Gareth Miles, *Oxford Dictionary of Economics* (2009), available at <http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t19.e3900>.

28. *Climate Action: Emissions Trading Scheme (EU ETS)*, EUROPEAN COMMISSION, http://ec.europa.eu/clima/policies/ets/index_en.htm (last updated Nov. 15, 2010).

emissions to society.²⁹ This market failure, which is termed the “environmental externality,” therefore results in the sub-optimal production of renewable energy. Second, analysts have pointed out that the market for energy is far from the perfect theoretical economic model, having been indelibly shaped by governmental policies supporting non-renewable methods of energy production for decades.³⁰ While the removal of these subsidies offers the potential for a reduction in GHG emissions,³¹ their continued existence keeps non-renewably produced energy at market prices significantly lower than that produced by renewable methods. Therefore, for renewable energy to be competitive in the market, it must be supported to overcome pre-existing market failures.³²

Aside from the aforementioned market failures specific to renewable energy, support for government intervention in the renewable energy market is also premised on general industrial policy that aims to realize latent comparative advantage within markets should certain market failures be overcome.³³ Within this strand of reasoning, entrepreneurs do not invest capital in the production of renewable energy because they cannot fully internalize the benefits of their investment. For example, “spill-over” externalities may include the appropriation and exploitation of methods or knowledge by competitors,³⁴ or increased productivity enjoyed by competitors or firms operating in other

29. Hussein Abaza, Vesile Kulaçoğlu, Anne Olhoff, Benjamin Simmons, Ludivine Tamiotti & Robert Teh, The United Nations Environment Program and the World Trade Organization, *Trade and Climate Change* 110–11, WORLD TRADE ORGANIZATION (2009), available at www.wto.org/english/res_e/booksp_e/trade_climate_change_e.pdf.

30. Robert Howse, *Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis* 5–6 (2010), available at http://www.iisd.org/pdf/2009/bali_2_copenhagen_subsidies_legal.pdf.

31. International Energy Agency, *World Energy Outlook Insights, Looking at Energy Subsidies: Getting the Prices Right* 10 (1999), <http://www.worldenergyoutlook.org/media/weowebiste/2008-1994/weo1999.pdf>.

32. Abaza et al., *supra* note 29, at 111.

33. Intergovernmental Panel on Climate Change, *Special Report on Renewable Energy Sources and Climate Change Mitigation* 870 (O. Edenhofer, R. Pichs-Madruga, Y. Sokona, K. Seyboth, P. Matschoss, S. Kadner, T. Zwickel, P. Eickemeir, G. Hansen, S. Schlömer & C. von Stechow eds., 2012), available at http://srren.ipcc-wg3.de/report/IPCC_SRREN_Full_Report.pdf/view [hereinafter IPCC, *Renewable Energy Sources*].

34. Mark Huberty & Georg Zachmann, *Green Exports and the Global Product Space: Prospects for EU Industrial Policy* 3–5 (Bruegel, Working Paper No. 2011/07, 2011), available at <http://www.bruegel.org/publications/publication-detail/publication/556-green-exports-and-the-global-product-space-prospects-for-eu-industrial-policy/>.

markets,³⁵ both at the expense of the investor. Further, it is argued that the market for renewable energy suffers from capital market imperfections that cause a lack of available funding for entrepreneurs, due to either an over-estimation of the risk of investment caused by imperfect information regarding the product, or from the inability to demonstrate the effectiveness of a product or method on a small scale.³⁶ This curtailment of capital flow causes a sub-optimal investment in renewable energy, which is used as a further justification for intervention in the market.

In addition to economic arguments based on failures within the market for renewable energy, the place of renewable energy production as a means of climate change mitigation also provides a strong argument in favor of government support. Anthropogenic climate change—caused by GHG emissions resulting from human activity—has been deemed to be 90% likely the cause of the “unequivocal”³⁷ climate change that threatens to irreversibly damage the world’s ecosystem.³⁸

Aside from pure environmental damage, climate change jeopardizes global security in myriad ways; it threatens to slash the economic prosperity of states,³⁹ cause a rise in the global sea level,⁴⁰ and endanger the health of millions of people worldwide.⁴¹ Such is the speed of the global warming that even according to the most optimistic estimates, the world temperature will inevitably

35. This externality comprises both Jacobian (benefitting firms within the same market) and Marshallian (benefitting firms in different stages of the value chain) elements. *Id.* at 3.

36. Abaza et al., *supra* note 29, at 111. This information failure can be overcome through the construction of government-funded demonstration models. *See also* Office of Carbon Capture and Storage, United Kingdom Department of Energy & Climate Change, *UK Carbon Capture and Storage (CCS) Commercial Scale Demonstration Program* (Dec. 2010), <http://www.decc.gov.uk/assets/decc/what%20we%20do/uk%20energy%20supply/energy%20mix/carbon%20capture%20and%20storage/1075-uk-ccs-commercial-scale-demonstration-programme-fu.pdf>.

37. Lenny Bernstein et al., Intergovernmental Panel on Climate Change, *Climate Change 2007: Synthesis Report* 30 (2007), available at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf. *See also* Elizabeth Muller, *250 Years of Global Warming: Berkeley Earth Releases New Analysis*, BERKELEY EARTH SURFACE TEMPERATURE (July 29, 2012), <http://berkeleyearth.org/pdf/berkeley-earth-press-release-july-29.pdf>.

38. United Nations Conference on Sustainable Development, Rio de Janeiro, Braz., June 20–22, 2012, *The Future We Want—Outcome Document* ¶25, ¶190, U.N. Doc. A/66/L.56, Annex I (July 24, 2012).

39. Nicholas Stern, *The Stern Review: The Economics of Climate Change—Summary of Conclusions* (2006), http://www.hm-treasury.gov.uk/media/3/2/Summary_of_Conclusions.pdf.

40. Bernstein et al., *supra* note 37, at 46.

41. *Id.* at 48.

rise by between 1.8 and 2 degrees Celsius by the end of the twenty-first century.⁴² Mitigation and adaptation are the two approaches advocated for dealing with this unprecedented change—the former focuses on the reduction of GHG emissions, which could be effectuated through *inter alia* the promotion of renewable energy,⁴³ while the latter aims to reduce vulnerability of society to the predicted changes that global warming may cause, such as storms, droughts and floods.⁴⁴ The power generation sector stands currently as the largest contributor to GHG emissions at just under 25% of the total emissions in 2000, providing one of the greatest potentials for mitigation efforts.⁴⁵ On the international level, coordination mechanisms that support the financing of mitigation efforts exist,⁴⁶ but are focused on assisting developing and least-developed countries in mitigation. As a result, they are not to be viewed as more than complementary efforts to policies enacted on the national level.⁴⁷

Both the economic and environmental arguments for market intervention and the lack of globally inclusive mechanisms to promote mitigation on the international plane place the burden of renewable energy promotion on national governments. Policies or laws adopted to pursue these ends by WTO members therefore potentially fall under the regulation of the WTO Agreements.⁴⁸

III. THE REGULATION OF SUBSIDIES WITHIN THE WTO

The regulation of subsidies has been a contentious issue since the inclusion of the first attempts to discipline the use of subsidies in the WTO's predecessor, the General Agreement of Tariffs and Trade (GATT). It provided that subsidies increasing exports, or limiting imports, could be subject to a request for consultations by a member-state with a view to "the possibility of limiting the subsidization."⁴⁹ By the Tokyo Round of negotiations, from 1973 to 1979, subsidies had grown to become "a more contentious

42. Bernstein et al., *supra* note 37, at 45; Abaza et al., *supra* note 29, at 4.

43. Bernstein et al., *supra* note 37, at 73.

44. Abaza et al., *supra* note 29, at 56.

45. *Id.* at 26.

46. Notably the Global Environment Facility, established by the World Bank in 1991. Global Environment Facility, *About GEF* (Dec. 1, 2011), <http://www.thegef.org/gef/whatisgef>.

47. Cf. IPCC, *Renewable Energy Sources*, *supra* note 33, at 871.

48. It is worth noting that the promotion of renewable energy by national governments is now also inevitably based on considerations of profit for the national economy. The Pew Charitable Trusts, *supra* note 2, at 9, 26.

49. General Agreement on Tariffs and Trade, art. XVI §A(1), Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

issue.”⁵⁰ The Tokyo Round of negotiations was characterized by the pursuit of particular interests by certain GATT member-states⁵¹ within a broader negotiating remit than had previously been undertaken.⁵² This served as a marked departure from the adherence to classical liberal economic principles that originally underpinned the conclusion of the GATT in 1947, and the pursuance of mercantilist self-interest by members resulted in a set of compromised agreements inevitably couched in vague language.⁵³ The abuse of subsidies and countervailing measures aimed at offsetting the effect of a subsidy within an importing country was viewed by some members as a growing and distorting non-tariff influence on international trade and often protected inefficient production at the expense of competitive industries.⁵⁴ Led by the US and EEC, the increasing concern over subsidies resulted in the 1979 Tokyo Round Subsidies Code,⁵⁵ whose provisions, while prohibiting certain subsidies,⁵⁶ were so “vague as to invite differences of interpretation, some others [were] so weak as to provide few constraints over subsidy practices that adversely affected the interests of other countries.”⁵⁷ The optional character of the Code exacerbated weaknesses caused by deficiencies in the text of the Code, such as the lack of a clear definition of a subsidy.

50. Peggy A. Clarke & Gary N. Horlick, *The Agreement on Subsidies and Countervailing Measures*, in 1 THE WORLD TRADE ORGANIZATION: LEGAL, ECONOMIC AND POLITICAL ANALYSIS 682 (Patrick F.J. Macrory, Arthur E. Appleton & Michael G. Plummer eds., 2005).

51. Particularly the US, Japan, the European Economic Community (EEC), and the group of Less Economically Developed Countries. Stephen D. Krasner, *The Tokyo Round: Particularistic Interests and Prospects for Stability in the Global Trading System*, 23 (4) INTERNATIONAL STUDIES QUARTERLY 491, 509 (1979).

52. The Tokyo Round was notably the first round of negotiations in which the GATT membership discussed lowering non-tariff barriers—obstacles to trade which stem from any action that is not an import tariff upon goods. Non-tariff negotiations in the Tokyo Round included agreements upon subsidies and countervailing measures, customs valuation, government procurement, technical barriers and standards, and import licensing procedures. *Id.* at 508.

53. *Id.* at 517.

54. General Agreement on Tariffs and Trade, *Multilateral Negotiations, Statement by GATT Director-General on Tokyo Round*, reprinted in 18 I.L.M. 553, 569 (1979).

55. Agreement on Interpretation and Application of Articles VI, XVI and XXIII of the General Agreement on Tariffs and Trade, GATT B.I.S.D. (26th Supp.) at 56 (1979) [hereinafter “Tokyo Round Subsidies Code”].

56. Notably export subsidies. *Id.* at art. 9.

57. Negotiating Group on Subsidies and Countervailing Measures, *Meeting of 16-17 March 1987*, MTN.GNG/NG10/1 ¶5 (Mar. 27, 1987), available at http://www.wto.org/gatt_docs/English/SULPDF/92020058.pdf.

The successor of the Tokyo Round of negotiations, the Uruguay Round, started in February 1987. The Uruguay Round spanned more negotiating material than the Tokyo Round and, crucially, reiterated the importance of lowering non-tariff barriers to trade such as subsidies. Subsidies and countervailing measures were given a separate “negotiating track” to other non-tariff barriers, which manifested the importance placed on the conclusion of a new agreement on the subject and implicitly acknowledged the failures of the Tokyo Round Subsidies Code.⁵⁸ While issues did arise in the negotiating process, GATT members quickly agreed upon, and negotiated within, the framework of a “traffic light” system of subsidies, which classified subsidies as either non-actionable (green), actionable (amber) or prohibited (red). Substantive negotiation from 1989 onwards therefore focused on coming to agreement upon the definitions of each of these three kinds of subsidies.⁵⁹ These negotiations resulted in the proposal of the Agreement on Subsidies and Countervailing Measures in 1991,⁶⁰ which was adopted with minor changes as part of the conclusion of the Round in 1994.

Currently, therefore, the regulation of subsidies under the existing WTO Agreements falls predominantly within the remit of the Agreement on Subsidies and Countervailing Measures (hereinafter “SCM Agreement”).⁶¹ Should a WTO member believe that subsidies implemented or directed by another WTO member-state are in breach of the provisions of the SCM Agreement, they may request consultations with the other member in pursuance of a mutually-acceptable solution to the dispute.⁶² If a mutually agreed solution is not reached within thirty days (for prohibited subsidies)

58. JOHN CROOME, *RESHAPING THE WORLD TRADING SYSTEM: A HISTORY OF THE URUGUAY ROUND* 41 (1994).

59. *Id.* at 200.

60. GATT Secretariat, *Draft Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations*, MTN.TNC/W/FA (Dec. 20, 1991).

61. Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 14 [hereinafter “SCM Agreement”]. Agricultural subsidies are regulated within the framework of the Agreement on Agriculture. Agreement on Agriculture, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 410. While outside the remit of this article, it should be noted that FITs have been challenged under Article III.4 of the GATT and Article 2.1 of the Agreement on Trade-Related Investment Measures. Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1868 U.N.T.S. 186 [hereinafter “TRIMs Agreement”]. See also *Canada—Renewables*, *supra* note 6, at 3; *Canada—Feed-in Tariff*, *supra* note 6, at 3.

62. SCM Agreement, *supra* note 61, at arts. 4.1, 7.1.

or sixty days (for actionable subsidies), the complaining member may request that the WTO Dispute Settlement Body (DSB), comprised of the complete WTO membership, to convene a panel to adjudicate the dispute.⁶³ If the complaining member is successful in contending before a panel that another member's policy is a prohibited subsidy under Article 3 of the SCM Agreement before a WTO dispute settlement panel, the panel can recommend removal of the offending subsidy by the implementing member.⁶⁴ Should the panel's determination not be abided by, the complaining member may win authorization to put in place "appropriate countermeasures,"⁶⁵ which has in the past been understood to mean trade restrictions of a quantum equivalent to the full amount of the illegal subsidy.⁶⁶ If a WTO panel deems a subsidy to be an illegal actionable subsidy under Article 5 of the SCM Agreement, the implementing or directing member must take measures to remove the "adverse effects" of the subsidy, or withdraw the subsidy completely.⁶⁷ If the member does not take effective measures following a ruling of illegality, the complaining member may gain authorization to put in place "countermeasures, commensurate with the degree and nature of the adverse effects determined to exist."⁶⁸ Panel reports in both instances may be appealed to the highest WTO tribunal, the Appellate Body, which makes a definitive determination on the dispute.⁶⁹

Based upon an analysis of the WTO Agreements and jurisprudence, the following three sections introduce lessons that should be borne in mind in the policy design stage of renewable energy subsidies, and which intend to function on three different levels. The first is aimed at creating support measures that do not fall within the SCM definition of a subsidy. The second is aimed at ensuring that a support measure that *does* fall within the definition of a subsidy evades being deemed an illegal subsidy. The third and fourth lessons pertain to ensuring that the subsidy, even if it is designated a prohibited subsidy or illegal actionable subsidy, may

63. *Id.* at arts. 4.4, 7.4.

64. *Id.* at art. 4.7.

65. *Id.* at art. 4.10.

66. See Appellate Body Report, *United States—Tax Treatment for "Foreign Sales Corporations"* WT/DS108/AB/R ¶90 (Feb. 24, 2000), download available at http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds108_e.htm [hereinafter "*US—FSC*"]; Decision by the Arbitrators, *Brazil—Export Financing Programme for Aircraft—Recourse to Arbitration by Brazil under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement*, WT/DS46/ARB (Aug. 28, 2000), available at http://www.wto.org/english/tratop_e/dispu_e/46arb_e.pdf.

67. SCM Agreement, *supra* note 61, at art. 7.8.

68. *Id.* at art. 7.9.

69. *Id.* at arts. 4.9, 7.7.

avail itself of the exception potentially available under Article XX of the GATT.

IV. LESSON ONE—THE PROSPECT OF NON-SPECIFICITY

In order to be classified as a subsidy within the meaning of Articles 1 and 2 of the SCM Agreement, the support measure must meet three cumulative criteria.⁷⁰ First, the purported subsidy must be a measure or policy adopted by a governmental or public body which provides a financial contribution to its recipients.⁷¹ Financial support is understood in a wide sense, with Article 1.1(a) exhaustively listing “financial contribution” as the direct transfers of funds,⁷² provision of loan guarantees,⁷³ the foregoing of revenue otherwise due (for example, tax breaks),⁷⁴ provision of goods or services other than general infrastructure, or the purchase of goods.⁷⁵ Article 1.1(a)(1)(iv) also encompasses the case in which a government “entrusts or directs” a private body to effectuate a financial contribution as understood in the preceding provisions of the Article (hence encompassing the scenario where a private energy provider is directed to run a FIT program by government).⁷⁶ Second, the measure must confer a benefit on the recipient under Article 1.1(b) of the SCM Agreement, which has been understood by the Appellate Body to mean “mak[ing] the recipient ‘better off’ than it would otherwise have been, absent that

70. Articles 1 and 2 of the SCM Agreement are “general provisions” of the Agreement, which define a subsidy and the circumstances in which a subsidy is to be considered specific, respectively. SCM Agreement, *supra* note 61, at arts. 1, 2.

71. *Id.* at art. 1.1(a).

72. *Id.* at art. 1.1(a)(1)(i).

73. *Id.*

74. *Id.* at art. 1.1(a)(1)(ii). This provision is manifestly aimed at the inclusion of tax breaks into the concept of subsidies, and is to be understood—presuming a generalized corporate tax regime—as foregoing revenue that would be collected *but for* the measure in place. *US—FSC*, *supra* note 66. See also Appellate Body Report, *Canada—Certain Measures Affecting the Automotive Industry*, WT/DS139/AB/R, WT/DS142/AB/R ¶¶ 90–94 (May 31, 2000).

75. SCM Agreement, *supra* note 61, at art. 1.1(a)(1)(iii).

76. Entrusting or directing a private body under Article 1.1(a)(1)(iv) was understood by the panel in *United States—Measures Treating Export Restraints as Subsidies* as being composed of three elements: (1) an explicit affirmative action, be it delegation or command; (2) addressed to a particular party; (3) the object of which is a particular duty or task. Report of the Panel, *United States—Measures Treating Export Restraints as Subsidies*, WT/DS194/R ¶8.29 (Jun. 29, 2001), available at [http://www.worldtradelaw.net/reports/wtopanelsfull/us-exportrestraints\(panel\)\(full\).pdf](http://www.worldtradelaw.net/reports/wtopanelsfull/us-exportrestraints(panel)(full).pdf). See also Clarke & Horlick, *supra* note 50, at 691.

contribution.”⁷⁷ This does not necessarily mean that the benefit conferred will be equal to the financial contribution in each case, and it is to be determined with reference to the conditions that the recipient would otherwise have been exposed to in the marketplace.⁷⁸ Third, the purported subsidy must be specific, under the meaning of Article 2 of the SCM Agreement. The requirement of specificity was designed as “an initial screening mechanism to winnow out only those foreign subsidies which truly are broadly available and widely used throughout an economy.”⁷⁹ Specificity is understood as either the limitation of a subsidy to a certain type of enterprise, whether explicitly based on the characteristics of the enterprise⁸⁰ or their geographical location,⁸¹ or limitation to a certain group of enterprises as the de facto effect of the subsidy.⁸² Finally, subsidies falling within the definitions of prohibited subsidies under Article 3 of the SCM Agreement are automatically considered to be specific.⁸³

The first lesson relies upon the above-mentioned specificity criteria that must be present for support to fall within the definition of a subsidy for the purposes of the SCM Agreement. Originally intended to ensure that government spending upon public goods that are used incidentally by domestic producers such as roads and police did not come within the remit of the SCM Agreement, the specificity criteria could equally be used to exempt subsidies for renewable energy from regulation under the Agreement.⁸⁴ Like transportation infrastructure and police forces, the nature of renewable energy as a public good suggests that governments should adopt broad climate change mitigation support strategies in order to maximize the positive externality of mitigation efforts. While these benefits would be global—and hence not fully benefit the domestic economy—the economic consequences of the harshest effects of global warming and the potential effects on a highly interconnected global economy certainly indicate that states have a vested interest in pursuing broad mitigation policies. Once it is decided to pursue a broad policy, a government could

77. Appellate Body Report, *Canada—Measures Affecting the Export of Civilian Aircraft*, WT/DS70/AB/R ¶157 (Aug. 2, 1999), available at [http://www.worldtradelaw.net/reports/wtoab/canada-aircraft\(ab\).pdf](http://www.worldtradelaw.net/reports/wtoab/canada-aircraft(ab).pdf).

78. *Id.*

79. See Clarke & Horlick, *supra* note 50, at 694.

80. SCM Agreement, *supra* note 61, at art. 2.1(a).

81. *Id.* at art. 2.2.

82. *Id.* at art. 2.1(b).

83. *Id.* at art. 2.3.

84. ANDREW GUZMAN & JOOST H.B. PAUWELYN, *INTERNATIONAL TRADE LAW* 414 (2009).

effectively avoid specificity if they instituted a horizontal, generally accessible subsidy based on neutral economic criteria, such as one that is available throughout all sectors of the economy and contingent upon adoption of a technology or process that affords a certain level of GHG reduction from pre-existing emission levels. The adoption of such a policy takes advantage of Article 2.1(b) and footnote 2 of the SCM Agreement, which provide respectively that:

Article 2.1(b): Where the granting authority, or the legislation pursuant to which the granting authority operates, *establishes objective criteria or conditions governing the eligibility for, and the amount of, a subsidy, specificity shall not exist*, provided that the eligibility is automatic and that such criteria and conditions are strictly adhered to. . . .⁸⁵

SCM Agreement, note 2: Objective criteria or conditions, as used herein, mean criteria or conditions which are *neutral*, which do not favour [sic] certain enterprises over others, and which are *economic in nature and horizontal in application*, such as number of employees or size of enterprise.⁸⁶

While a generally available subsidy based on objective criteria could evade the remit of the SCM Agreement, it would not be without difficulties. First, the political and financial viability of extending such a subsidy to all sectors of the economy—as would be necessary to avoid specificity—is questionable. A cut in fossil fuel subsidies could go some way to funding the policy, yet the financial burden of and the political will for the adoption of a general subsidy would differ greatly between countries, and feasibility would have to be assessed on a country-by-country basis. Second, the administrative burden of maintaining such a subsidy would inevitably be large, and may extend the adoption of such a subsidy beyond the reach of some countries. The world's largest GHG-emitting countries, however, are those within the G20 group of developed countries, which have a demonstrated willingness and capability to resource large renewable energy promotion programs.⁸⁷ The additional burden that a general

85. SCM Agreement, *supra* note 61, at art. 2.1(b) (emphasis added).

86. *Id.* at art. 2.1(b), n. 2 (emphasis added).

87. For example, twelve member-states of the G20 (including the US, China, South Korea, and the EU 27) responded to the global economic crisis of 2008–2009 by committing to stimulus packages focused on the green energy sector that amounted to \$194 billion. The Pew Charitable Trusts, *supra* note 2, at 26.

subsidy may cause does not, therefore, seem out of reach of those countries in which its application may be most effective.

V. LESSON TWO—THE ABSOLUTENESS OF NON-DISCRIMINATION

Since the expiration of a category of virtuous “non-actionable” subsidies that were exempt from the provisions of the SCM Agreement in 2000,⁸⁸ subsidies now fall within two categories—either prohibited or actionable subsidies. Prohibited subsidies are those that are, in law or fact, contingent upon export performance—tied to anticipated or actual export earnings⁸⁹—or those subsidies whose provision is contingent on the use of domestic over imported goods.⁹⁰ While support measures falling within the definition of prohibited subsidies are illegal regardless of their effects, the illegality of actionable subsidies rests upon an effects-based analysis, providing that subsidies shall be deemed illegal if they cause “adverse effects” to the interests of other member-states, including injury to domestic producers,⁹¹ nullification or impairment of direct or indirect benefits conferred upon a member by virtue of the GATT,⁹² or cause serious prejudice to another member’s interests.⁹³ The circumstances in which it is to be considered that serious prejudice occurred are listed in Article 6 of the SCM Agreement, and include the scenario in which “the effect of the subsidy is to displace or impede the imports of a like product of another Member into the market of the subsidizing Member.”⁹⁴

It is worth noting that all renewable energy subsidies that have been subject to consultations, or subject to requests to convene dispute settlement panels, within the WTO have had a purportedly explicit discriminatory or protectionist character, hence falling within the definition of a prohibited subsidy. For example, the Ontarian FIT described above made eligibility for participation in the FIT and microFIT schemes contingent on a domestic content requirement, stating that a minimum amount of 50% of goods and services for wind projects, and 60% for solar projects, shall come

88. SCM Agreement, *supra* note 61, at art. 8.2. Protected subsidies included subsidies for research activities, subsidies to support disadvantaged regions, and subsidies to help adaption to new environmental regulation.

89. *Id.* at art. 3.1(a) n. 4.

90. *Id.* at art. 3.1(b).

91. *Id.* at art. 5(a).

92. *Id.* at art. 5(b).

93. *Id.* at art. 5(c).

94. SCM Agreement, *supra* note 61, at art. 6.3(a).

from Ontario.⁹⁵ Similarly, Chinese subsidies for wind power equipment that were subject to a complaint by the US in 2010 were purportedly contingent upon export performance and domestic content requirements.⁹⁶

The second lesson is pertinent to government support measures that fall within the definition of a subsidy, as understood by the SCM Agreement. Non-discrimination is a key concept in WTO law, and the provisions under which discriminatory subsidies may be challenged are numerous. First, as noted above, Articles 3 and 5 of the SCM Agreement respectively provide that subsidies cannot *de jure*⁹⁷ or *de facto*⁹⁸ discriminate between domestic and foreign goods. Discriminatory subsidies may also be challenged under Article III: 4 of the GATT and Article 2 of the TRIMs Agreement, which prohibit measures that afford imported goods less favorable regulatory treatment than that enjoyed by domestic goods. Finally, in order for the subsidy to avail itself of the exception under Article XX of the GATT, examined below, the chapeau requires that a measure cannot be arbitrarily or unjustifiably discriminatory.⁹⁹ The second lesson is simple and absolute: a renewable energy subsidy that is discriminatory, in law or fact, will not withstand a test of legality under the laws of the WTO.

VI. LESSONS THREE AND FOUR—LINKS TO INTERNATIONAL AGREEMENTS AND OPEN AND TRANSPARENT PROCESSES

While the “safe-haven” category of non-actionable subsidies has expired, commentators have argued that exceptions to the rules of the GATT, available under Article XX, are equally applicable to the provisions of the SCM Agreement. Article XX provides exemptions for certain sensitive or virtuous policies, including those that aim to protect animal, human, and plant life or health,¹⁰⁰ public morals,¹⁰¹ condemn prison labor,¹⁰² and—most pertinently

95. *OPA FIT Program Overview*, *supra* note 12, at 6. For the microFIT program, domestic content requirements are limited to projects using solar photovoltaic cells, which must be composed of 60% domestic content. *OPA microFIT Program Overview*, *supra* note 11, at 12.

96. See United Steelworkers, *United Steelworkers' Section 301 Petition Demonstrates China's Green Technology Practices Violate WTO Rules*, <http://assets.usw.org/releases/misc/section-301.pdf> (last visited Sept. 12, 2012).

97. By contingency upon export performance of the product or upon the use of domestic products in the production of the good.

98. For example, subsidies cannot cause “adverse effects” on another members market.

99. GATT, *supra* note 49, at art. XX.

100. *Id.* at art. XX(b).

101. *Id.* at art. XX(a).

for our purposes—are aimed at the conservation of natural resources.¹⁰³ Leaving open the question of the applicability of Article XX exceptions to agreements outside the GATT, it is nevertheless important to consider what steps a member should take if they wish to avail themselves of the exceptions.¹⁰⁴

In order to assess if a provision may fall within an Article XX exception, it is necessary to carry out a two-step analysis. First, the provision must fall within the definition of one of the exempt categories, of which we will take subsection (g) as an example, it being the most readily applicable to renewable energy promotion policies.¹⁰⁵ Second, the policy must pass the test under the “chapeau” of Article XX, which outlaws measures that are arbitrarily or unjustifiably discriminatory, or those that are disguised restrictions on international trade.

Article XX(g) provides an exception for measures “relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.” This can be divided into two distinct requirements. First, the measure must be *related to* the conservation of exhaustible resources. In *United States—Import Prohibition of Certain Shrimp and Shrimp Products* (“US—Shrimp”), the Appellate Body confirmed that Article XX(g) was understood to cover the conservation of inanimate resources, such as fossil fuels, as well as measures designed to conserve exhaustible natural living resources, hence comprising renewable

102. *Id.* at art. XX(e).

103. *Id.* at art. XX(g).

104. On the applicability of Article XX to the SCM Agreement, see Brief of Amicus Curiae Submission by International Institute on Sustainable Development, Canadian Environmental Law Association & Ecojustice Canada, *Canada—Certain Measures Affecting the Renewable Energy Generation Sector (DS412)* (May 10, 2012), available at http://www.iisd.org/pdf/2012/ecojustice_amicus_curiae_brief.pdf; Daniel Peat, *The Wrong Rules for the Right Energy: the WTO SCM Agreement and Subsidies for Renewable Energy*, 24 ENVTL. L. & MGMT. 7 (2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1998240; Wilke, *supra* note 9, at 8–12; Robert Howse, United Nations Conference on Trade and Development, *World Trade Law and Renewable Energy: The Case of Non-Tariff Barriers*, UN Doc. UNCTAD/DITC/TED/2008/5 11–14 (2009), available at http://archive.unctad.org/trade_env/test1/publications/UNCTAD_DITC_TED_2008_5.pdf.

105. Also, it should be noted that the requirements to invoke art. XX(b) are more difficult to fulfill than those under art. XX(g), particularly because it must be shown that the measure is *necessary* for the protection of human, animal or plant life or health. Michael Hertel, *Climate-Change-Related Trade Measures and Article XX: Defining Discrimination in Light of the Principle of Common but Differentiated Responsibilities*, 45 J. WORLD TRADE 653, 669 (2011).

energy promotion measures.¹⁰⁶ In light of the depletion of the world's fossil fuel resources, as well as the damage that climate change causes to the world's ecosystems more generally, measures promoting renewable energy are manifestly related to this objective. Second, the measure must be integrated with measures restricting domestic consumption and production. The compatibility of renewable energy policies with this criterion will therefore depend on the structure of each specific policy or measure, but should be met if the implementing government has a general climate change mitigation policy in place.

The second step that must be passed is that of the chapeau of Article XX, which was also dealt with comprehensively in *US-Shrimp*. In that case, the measures at issue were United States regulatory requirements that imported shrimp must be caught using harvesting methods that did not adversely affect sea turtles. Specifically, in order for shrimp to be exported to the US, states must have their regulatory framework certified to the effect that all shrimp trawlers used "turtle excluding devices," which prevent sea turtles from being caught in the trawler's net when shrimp fishing.¹⁰⁷ India, Malaysia, Pakistan and Thailand brought a case to the WTO Dispute Settlement Mechanism alleging that the US requirements breached certain provisions of the GATT. At the panel stage of proceedings, the US conceded that the measures in place constituted an illegal quantitative restriction under the meaning of Article XI GATT, but argued that the requirements under the Act were justified by Article XX(g). The Appellate Body recognized that the US regulations *prima facie* fit the requirements of subsection (g), and continued to analyze them in light of the chapeau of Article XX. The Chapeau states that:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of *arbitrary or unjustifiable discrimination* between countries where the same conditions prevail, or a *disguised restriction on international trade*, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measure¹⁰⁸

106. See Appellate Body Report, *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R ¶¶128–131 (Oct. 12, 1998), available at http://www.wto.org/english/tratop_e/dispu_e/58abr.pdf [hereinafter "*US-Shrimp*"].

107. See Sea Turtle Conservation; Shrimp Trawling Requirements, 52 FR 24244, Pub. L. No. 101–62, 103 Stat. 988, § 609(b)(2) (1987).

108. GATT, *supra* note 49, at art. XX (emphasis added).

In deeming that the US regulations constituted an unjustifiable and arbitrary discrimination between countries, the Appellate Body relied predominantly on four characteristics of the implementation of the US rules. First, the Appellate Body noted that the US rules obliged states wanting to export to the US to adopt effectively the same regulatory standards as the US in order to be able to exercise their rights to trade under the GATT,¹⁰⁹ even if different conditions prevailed in those states.¹¹⁰ Further, even states using identical methods as those required by the US law were excluded from exporting to the US simply because the state in question had not been certified as meeting US standards. This prompted the Appellate Body to state:

[W]e believe that discrimination results not only when countries in which the same conditions prevail are differently treated, but also when the application of the measure at issue does not allow for any enquiry [sic] into the appropriateness of the regulatory program for the conditions prevailing in those exporting countries.¹¹¹

Aside from the adoption of this “single, rigid and unbending,”¹¹² regime that did not account for circumstantial differences, the Appellate Body identified a second discriminatory characteristic of the US policy. They found the asymmetry of treatment afforded to exporting states by the US administration to be discriminatory, with those in the wider Caribbean/western Atlantic region given a period three times longer in which to adapt their regulatory systems than other exporting states.¹¹³ Third, the Appellate Body gave weight to the failure of the US:

[T]o engage the appellees, as well as other Members exporting shrimp to the United States, in serious, across-the-board negotiations with objective of concluding bilateral or multilateral agreements for the protection and conservation of sea turtles, before enforcing the import prohibition against the shrimp exports of those other members.¹¹⁴

109. *US-Shrimp*, *supra* note 106, at ¶¶ 161–62.

110. *Id.* at ¶ 164.

111. *Id.* at ¶ 165.

112. *Id.* at ¶ 177.

113. *Id.* at ¶ 173.

114. *Id.* at ¶ 166.

The US did, however, engage in dialogue with some other WTO members towards finding mutually acceptable solutions.¹¹⁵ This approach to negotiations was, in the view of the Appellate Body, “plainly discriminatory and, in our view, unjustifiable.”¹¹⁶ Finally, the Appellate Body emphasized the “non-transparent and *ex parte* nature of the internal government procedures . . . throughout the certification processes . . .”¹¹⁷ particularly the lack of formal denial of certification for some states, and the lack of reasons given for denial. This consolidated the conclusion that the US regulations constituted both unjustifiable and arbitrary discrimination.¹¹⁸

While the Appellate Body in *US-Shrimp* did not find it necessary to examine if the US measures constituted a “disguised restriction on international trade” under the chapeau of Article XX, GATT panels in the *United States—Prohibition of Imports of Tuna and Tuna Products from Canada*¹¹⁹ and *United States—Imports of Certain Automotive Spring Assemblies*¹²⁰ cases examined this issue, coming to differing opinions on whether publicity of a measure by a public authority automatically ruled out its qualification as a “disguised restriction.” This division was settled by the Appellate Body in another case, *United States—Standards for Reformulated and Conventional Gasoline*,¹²¹ in which the Appellate Body held that a “concealed or unannounced restriction or discrimination in international trade does not exhaust the meaning of ‘disguised restriction.’”¹²² This interpretation was followed by the panel in *European Communities—Measures Affecting Asbestos and Asbestos-Containing Products*,¹²³ which continued to determine that the intent of a measure should be based on an analysis of its “design, architecture and revealing

115. *US-Shrimp*, *supra* note 106, at ¶ 169. Specifically with Brazil, Costa Rica, Nicaragua and Peru in the framework of the Inter-American Sea Turtle Convention. See Inter-American Convention for the Protection and Conservation of Sea Turtles art. XV, Dec. 1, 1996, 2164 U.N.T.S. 29, 31.

116. *US-Shrimp*, *supra* note 104, at ¶ 172.

117. *Id.* at ¶ 183.

118. *Id.* at ¶ 184.

119. Report of the Panel, *United States—Prohibition of Imports of Tuna and Tuna Products from Canada*, GATT B.I.S.D. (29th Supp.) at 91 (1982).

120. Report of the Panel, *United States—Imports of Certain Automotive Spring Assemblies*, GATT B.I.S.D. (30th Supp.) at 108 (1983).

121. Appellate Body Report, *United States—Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R (Apr. 29, 1996), available at http://www.wto.org/english/tratop_e/dispu_e/2-9.pdf.

122. *Id.* at 24–25.

123. Panel Report, *European Communities—Measures Affecting Asbestos and Asbestos-Containing Products*, WT/DS135/R ¶ 8.232 (Sep. 18, 2000), available at http://www.wto.org/english/tratop_e/dispu_e/135r_c_e.pdf.

structure.”¹²⁴ An effective subsidy for renewable energy must, therefore, not manifest any characteristics of a restriction on trade, which is to be considered in conjunction with the non-discrimination mandated under the first part of the chapeau of Article XX.

The third and fourth lessons, taken together, are aimed at ensuring that a subsidy, even if deemed illegal, may avail itself of the potential exception available under Article XX of the GATT. While necessary, but not singularly sufficient, to come within the remit of an exception, the lessons present the most important steps in fulfilling the cumulative criteria identified in the preceding analysis. The third lesson suggests that subsidies should have a clear and explicit link to goals or targets established by international agreements, such as those set by Annex B countries within the framework of the Kyoto Protocol to the United Nations Framework Convention on Climate Change.¹²⁵ Explicit reference to international targets serves two purposes in relation to Article XX. First and most importantly, it augments the “relatedness” of the subsidy to the goal of the conservation of natural resources, required by the wording of Article XX(g). Second, an explicit link demonstrates to a WTO panel that the policy does not constitute a “disguised restriction on trade,” as prohibited under the chapeau of Article XX. In addition, reference to international GHG-reduction targets could usefully serve as the basis for objective criteria governing the eligibility for subsidies, as examined in the first lesson. An explicit link could be included within, for example, implementing legislation providing that energy efficiency devices that contributed by a certain percentage towards the attainment of the WTO member’s internationally agreed GHG reduction target were to be recipients of government support.

The fourth lesson takes inspiration from the *US-Shrimp* case to suggest that WTO member-state governments should engage other members in dialogue regarding, and allow them to comment upon, climate change mitigation subsidies when they are in their formative stages. By doing this, the implementing state is following the optimal method for ensuring that their support policies are not challenged in the WTO Dispute Settlement Mechanism—they address the concerns of other members and open channels of dialogue that may alter the design of the policy to a mutually-acceptable solution before a trade dispute arises. This

124. *Id.* at ¶ 8.236.

125. Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, U.N. Doc. FCCC/CP/1997/7/Add.1, 37 I.L.M. 22 (1998).

transparency should continue into the implementation phase of the policy, enabling the implementing state to make manifest to other WTO members that no “arbitrary or unjustifiable discrimination” within the meaning of the chapeau of Article XX is taking place. Both the third and fourth lessons are cost-effective and feasible methods of ensuring that a renewable energy subsidy meets the requisites of Article XX. What remains to be seen, however, is the willingness of WTO panels, or the Appellate Body, to explicitly recognize the applicability of Article XX to provisions contained within agreements outside the GATT.¹²⁶

VII. CONCLUSION

The international trade regime is at a critical juncture in its history. With the conclusion or modification of multilateral trade agreements in the near future rendered impossible by the impasse in the Doha Round negotiations, WTO members should account for the rigors of the current WTO disciplines in the formative stages of their policy design to avoid the undesirable result of a determination of illegality. After comprehensively reviewing the WTO legal texts and Dispute Settlement Mechanism jurisprudence, this Comment suggested four lessons that should be followed by member-states wishing to implement subsidies for renewable energy. First, it suggested that financial support from renewable energy production or equipment could avoid “specificity” under the meaning of Article 2 of the SCM Agreement—and hence avoid falling under the rules for subsidies in the WTO—by effective integration into an objective, neutral and horizontal comprehensive climate change mitigation policy. Second, it noted that the principle of non-discrimination should be strictly adhered to in the context of renewable energy subsidies in the international trade regime. Third, it argued that linking these comprehensive climate change policies to international agreements and commitments could assist in helping the policy either avoid specificity or, failing that, to fall within the exception covered under Article XX(g). Finally, this Comment pointed out the importance of transparency and inclusiveness throughout the design and implementation stages of the policy process, and highlighted the desirability of mutually acceptable solutions as opposed to judicially settled disputes.

The WTO presents an opportunity for the world to increase members’ long-run wealth, yet this cannot be allowed to impact

126. This may be clarified by the panel in the forthcoming *Canada—Renewables* (DS412) case.

the obligation that the global community has to mitigate anthropogenic climate change. Subsidies for renewable energy are vulnerable to legal challenge within the WTO, whether such a challenge is motivated by political, economic or legal reasons, placing the burden on implementing states to ensure legality under the existing international trade rules. In the short-run, appropriate policy design based upon a thorough analysis of the obligations binding WTO members is the most effective method of ensuring the legality of subsidies for renewable energy.